

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS 1. C. BOK 1436 feets of Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/034,966	12/26/2001	Antoine Kawam	00216-529001 / T-681	9312
26161 7	590 08/04/2004		EXAMINER	
FISH & RICHARDSON PC			LAMM, MARINA	
225 FRANKLIN ST BOSTON, MA 02110			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

,	Application No.	Applicant(s)				
	10/034,966	KAWAM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Marina Lamm	1616				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>07 M</u>	1) Responsive to communication(s) filed on <u>07 May 2004</u> .					
2a) This action is FINAL . 2b) ☑ This)☐ This action is FINAL . 2b)☑ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) <u>1-9,11-13,15-20 and 27-54</u> is/are pen 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-9,11-13,15-20 and 27-54</u> is/are reje 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Page 2

Application/Control Number: 10/034,966

Art Unit: 1616

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/7/04 has been entered.
- 2. Claims pending are 1-9, 11-13, 15-20 and 27-54. Claims 1, 2 and 27 have been amended. Claims 31-54 are new.

Claim Rejections - 35 USC § 102

- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 4. Claims 38-43 and 48-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Watson (US 3,858,764), of record.

Watson teaches a pressurized container having a supplemental source of propellant (a reservoir) capable of releasing propellant into the system when the additional propellant is required. See col. 1, lines 38-45. Watson teaches that his containers can be used for dispensing products wherein the propellant is in a gaseous phase and/or dissolved in the composition (concentrate), thus being useful for dispensing both foams and non-foamed formulations such as liquids and solids. See col.

Art Unit: 1616

2, lines 65-67; col. 3, lines 1-15. In particular, the container of Watson can be used for dispensing shaving foams containing soap solutions. See col. 3, lines 58-61; Example 1. With respect to Claim 5, Watson teaches that when the composition is dispensed, the propellant from the reservoir is released and a gas/liquid equilibrium is established. See col. 4, lines 48-60. The reservoir is either solid or is enveloped in a solid material which is retained in the container as the composition is being dispensed. See col. 3, lines 20-25. The reservoir can be made of organic polymeric materials such as rubbers (e.g. silicones, latex rubbers, polyisobutylene rubbers, etc.), including partially vulcanized (cross-linked) rubbers which are capable of holding the propellant in solution which does not flow under its own weight. See col. 4, lines 38-45; col. 5, lines 55-60; col. 7, lines 49-59; Table 7. Watson teaches that the reservoir material is capable of swelling when charged with the propellant (e.g. forms gel with the propellant) and returns to its original dimensions as it loses the propellant. See col. 9, lines 62-67; Table 4. Useful propellants include aliphatic hydrocarbons and halogenated hydrocarbons having vapor pressures in the range 5-200 psig. See col. 2, lines 55-60. When the compositions of Watson are dispersed as foams, a uniform density of foam is maintained until virtually the entire contents (about 90%) of the dispenser have been dispensed. See col. 20, lines 42-56. With respect to the limitation "a sorbant that includes capillaries," Watson exemplifies rubber foam as a suitable material for the reservoir. See Table 7. With respect to Claims 48-51, which are directed to a method of manufacturing a personal care product, Watson teaches providing a polymer reservoir (sorbant) within a

Art Unit: 1616

container containing a shaving foam, sealing the container and adding the propellant through the valve. See Example 1. The reservoir can be mounted on the dip tube or formed as a continuous coating on the inside wall of the container. See col. 4, lines 9-24. With respect to Claim 43, which recites that the solubility parameter of the polymer is within 2 units of the solubility parameter of the propellant, this limitation is inherent in the Watson reference because his polymers are capable of holding the propellant in solution (i.e. either gel or liquid) as discussed above.

Thus, Watson teaches each and every limitation of Claims 38-43 and 48-51.

5. Claims 1-6, 9, 11, 12, 15-20, 27, 28, 31-35, 38, 39, 42-49 and 52-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Alexander (US 3,964,649), of record.

Alexander teaches pressurized containers for dispensing personal care products, such as foams, shampoos, shaving creams, antiperspirants, etc., comprising a personal care composition and a reservoir containing a hydrocarbon propellant. See Abstract; Figures; col. 1, lines 27-64; Examples. The reservoir comprises an envelope constructed from open cell polyethylene or polypropylene foams or non-woven fibers and silica sorbent core. See col. 2, lines 9-21; Figures. The pressure in the headspace of the container is 10-70 psig. See col. 1, lines 65-68. Preferably, the personal care fluid product does not absorb the propellant gas, however, if the product is dispensed as a foam, the dissolution of the liquefied propellant in the product will be necessary. See col. 2, lines 22-29. The products of Alexander are manufactured by filling the personal care formulation into the dispensing device containing the reservoir which had been

Art Unit: 1616

previously immersed in the liquefied propellant and introducing gaseous propellant via the valve into the formulation. See Examples. The open cell foams or fibers of Alexander inherently form gel with at least a portion of the propellant because the reference teaches the same propellants and the same polymeric foams and fibers as disclosed in the instant case.

Thus, Alexander teaches each and every limitation of Claims 1-6, 9, 12, 15-20, 27, 28, 31-35, 38, 39, 42, 44-49 and 52-54.

Claim Rejections - 35 USC § 103

- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claims 1-9, 11, 12, 15-20, 27-30, 44 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson in view of Benoist (US 6,527,150).

Watson applied as above. Further, with respect to Claim 19, which recites that the sorbant has a relatively higher affinity for the propellant than for the composition, Watson teaches that his reservoir materials "should not absorb, dissolve or otherwise remove any component of the concentrate to an extent which would cause the dispensed concentrate product to be significantly changed in character". See col. 5, lines 8-14. With respect to Claim 20, which recites that the propellant is substantially insoluble in the composition, Watson teaches that his dispenser can be used for dispensing various systems, including those in which the propellant is a separate phase and not dissolved in the composition (e.g. aqueous concentrates and solid products).

Art Unit: 1616

See col. 3, lines 1-8. While teaching rubber foam as a sorbant, the Watson reference does not explicitly teach the claimed open cell foam. However, Benoist teaches using open or semi-open cell foams to trap the liquid phase of the propellant in devices for dispensing personal care products. See Abstract; Figures; col. 2, lines 10-12, 55-66. The propellant is absorbed and trapped in the open cells of the foam. See col. 4, lines 23-26. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dispensers of Watson such that to employ open cell foam as a sorbent/propellant retainer. One having ordinary skill in the art would have been motivated to do this to obtain the desired absorption and retention of the propellant in the sorbent/retainer as suggested by Benoist.

- 8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over (1) Watson in view of Benoist and further in view of de LaForcade et al. (US 6,464,111) and Villars (US 5,451,396) or (2) Alexander in view of de LaForcade et al. and Villars.
- (1) Watson in view of Benoist applied as above. Watson teaches that his containers are suitable for dispensing a variety of compositions such as aqueous concentrates, toothpastes, shaving foams, solids and hairsprays. See col. 3, lines 1-8; col. 20, lines 59-69. Watson does not explicitly teach dispensing compositions comprising a gel as claimed in the instant claim. However, it is known in the art of cosmetic products to formulate shaving products as either gels, foams or creams and package them in pressurized dispensing containers. See de LaForcade et al. at col. 4, lines 51-54. Further, Villars teaches that clear products such as gels, are becoming

Page 7

Art Unit: 1616

increasingly more desirable to the consumers because they are perceived as less irritating. See col. 1, lines 24-30. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the products of Watson such that to use shaving gels as dispensing compositions. One having ordinary skill in the art would have been motivated to do this to obtain an additional, conveniently dispensed, consumer-appealing shaving product as suggested by de LaForcade et al. and Villars.

- (2) Alexander applied as above. Alexander does not explicitly teach dispensing compositions comprising a gel as claimed in the instant claim. However, it is known in the art of cosmetic products to formulate shaving products as either gels, foams or creams and package them in pressurized dispensing containers. See de LaForcade et al. at col. 4, lines 51-54. Further, Villars teaches that clear products such as gels, are becoming increasingly more desirable to the consumers because they are perceived as less irritating. See col. 1, lines 24-30. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the products of Alexander such that to use shaving gels as dispensing compositions. One having ordinary skill in the art would have been motivated to do this to obtain an additional, conveniently dispensed, consumer-appealing shaving product as suggested by de LaForcade et al. and Villars.
- 9. Claims 29, 30, 36, 37, 50 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alexander in view of Watson.

Art Unit: 1616

Alexander applied as above. Alexander does not explicitly teach adhering the sorbant reservoir to in the inner surface or to the dip tube. However, Watson teaches that the reservoir can be mounted on the dip tube or on the inside wall of the container. See col. 4, lines 9-24. Further, Watson teaches that the reservoir positioning within the container can vary depending on where the container is assembled but should not interfere with the operation of the dip tube or valve. See col. 4, lines 2-7, 26-29. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dispensing devices of Alexander such that to adhere the reservoir to the inside wall or dip tube of the container. One having ordinary skill in the art would have been motivated to do this to prevent interfering of the reservoir with the operation of the dip tube or valve as suggested by Watson.

Response to Arguments

10. Applicant's arguments with respect to claims 1-9, 11, 12, 15-20 and 27-30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. GB 2 021 698.
- 12. No claim is allowed at this time.

Art Unit: 1616

Page 9

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Lamm whose telephone number is (571) 272-0618. The examiner can normally be reached on Mon-Fri from 11am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (571) 272-0887.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MICHAEL G. HARTLEY
PRIMARY EXAMINER

ml 7/30/04